

09/772,280

**WEST****Freeform Search**

Database:

US Patents Full-Text Database  
 US Pre-Grant Publication Full-Text Database  
 JPO Abstracts Database  
 EPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Term:

17 and two temperature\$1

Display:  Documents in Display Format:  Starting with Number Generate: ☐ Hit List ☒ Hit Count ☐ Side by Side ☐ Image

Search

Clear

Help

Logout

Interrupt

Main Menu

Show S Numbers

Edit S Numbers

Preferences

Cases

**Search History**DATE: Thursday, July 03, 2003 [Printable Copy](#) [Create Case](#)Set Name Query  
side by sideHit Count Set Name  
result set

DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

<u>L8</u>	17 and two temperature\$1	1	<u>L8</u>
<u>L7</u>	(mobile or moving) near5 sample\$1 near5 member\$1	246	<u>L7</u>
<u>L6</u>	(mobile or moving) near5 sample\$1 near5 member%1	0	<u>L6</u>
<u>L5</u>	L4 and (prevent near5 evaporat\$3)	0	<u>L5</u>
<u>L4</u>	L3 and humid	3	<u>L4</u>
<u>L3</u>	L2 and (chem\$5 or biochem\$5)	272	<u>L3</u>
<u>L2</u>	L1 and (two near5 temperature\$1)	342	<u>L2</u>

DB=DWPI,USPT,EPAB,JPAB; PLUR=YES; OP=ADJ

<u>L1</u>	(mobile or moving) near5 sample\$1	11020	<u>L1</u>
-----------	------------------------------------	-------	-----------

END OF SEARCH HISTORY

FILE 'EMBASE' ENTERED AT 12:58:54 ON 03 JUL 2003  
COPYRIGHT (C) 2003 Elsevier Science B.V. All rights reserved.

=> s (mobile or moving) near5 sample# near5 member#  
MISSING OPERATOR MOVING) NEAR5  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s (mobile or moving)(10a) sample# (10a) member#  
L1 14 (MOBILE OR MOVING)(10A) SAMPLE# (10A) MEMBER#

=> s l1 and (two (10a) temperature#)  
L2 0 L1 AND (TWO (10A) TEMPERATURE#)

=> s (mobile or moving)(10a) sample#  
L3 5094 (MOBILE OR MOVING)(10A) SAMPLE#

=> s l3 and (two (10a) temperaature#)  
L4 0 L3 AND (TWO (10A) TEMPERAATURE#)

=> s l3 and (two(10a)temperature#)  
L5 10 L3 AND (TWO(10A) TEMPERATURE#)

=> s l5 and (chem##### or biochem#####)  
L6 3 L5 AND (CHEM##### OR BIOCHEM#####)

=> d l6 1-3 bib ab kwic

L6 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 2000:277724 BIOSIS  
DN PREV200000277724  
TI Thermocycling apparatus and method.  
AU Hunicke-Smith, Scott P. (1)  
CS (1) Menlo Park, CA USA  
PI US 5985651 November 16, 1999  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(Nov. 16, 1999) Vol. 1228, No. 3, pp. No pagination. e-file.  
ISSN: 0098-1133.

DT Patent

LA English

AB A thermocycling apparatus comprising a plurality of capillaries for  
**moving** DNA-containing **samples** between **two** or  
more discrete zones maintained at selected elevated **temperatures**

AB A thermocycling apparatus comprising a plurality of capillaries for  
**moving** DNA-containing **samples** between **two** or  
more discrete zones maintained at selected elevated **temperatures**

IT Major Concepts

**Biochemistry** and Molecular Biophysics; Equipment, Apparatus,  
Devices and Instrumentation

IT Chemicals & Biochemicals  
DNA

L6 ANSWER 2 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.  
AN 2002272400 EMBASE  
TI Temperature-promoted large-volume solute enrichment in column-switching  
miniaturized liquid chromatography: Determination of an antioxidant.  
AU Molander P.; Holm A.; Lundanes E.; Hegna D.R.; Ommundsen E.; Greibrokk T.  
CS P. Molander, Natl. Inst. of Occupational Health, P.O. Box 8149 Dep, N-0033  
Oslo, Norway. pal.molander@stami.no  
SO Analyst, (2002) 127/7 (892-897).  
Refs: 31  
ISSN: 0003-2654 CODEN: ANALAO

CY United Kingdom  
DT Journal; Article  
FS 029 Clinical Biochemistry  
LA English  
SL English

AB A two-valve sub-ambient temperature-promoted reversed-phase packed-capillary liquid-chromatography column-switching system has been tailored for sensitive determination of hydrophobic compounds. Such compounds are not easily dissolved in solvent mixtures of non-eluting properties that traditionally are used for solute enrichment in reversed-phase liquid chromatography. Enrichment-column solute focusing of large sample volumes was promoted by use of sub-ambient temperatures only, allowing the use of sample solvents that were stronger or equal to the mobile phase solvent strength. Subsequent column switching and enrichment-column temperature increment provided efficient low-dispersion back-flushed enrichment-column solute desorption onto the analytical column, where the solute was subjected to temperature-programmed gradient action. The antioxidant, Irganox 1076 (octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate) extracted from low density polyethylene with 100% acetonitrile served as a hydrophobic model compound. The mobile phase consisted of acetonitrile containing 10 mM triethylamine and formic acid, and the 0.25 mm id enrichment-column and analytical column in lengths of 27 and 250 mm, respectively, were packed with 3.5 .mu.m Kromasil C(18) particles. Sample volumes of up to 500 .mu.L were successfully focused on the enrichment column at 5.degree.C using loading flow rates of up to 40 .mu.L min<sup>-1</sup> prior to temperature programming to 90.degree.C. The concentration limit of detection of Irganox 1076 was 6 ng mL<sup>-1</sup> when using an injection volume of 500 .mu.L. The within-assay precision was in the range 3.5-6.8% (n = 6) while the between-day precision was 7.5% (n = 3) relative standard deviation. The method was linear within the investigated mass range 3-100 ng (R(2) = 0.9993).

AB A two-valve sub-ambient temperature-promoted reversed-phase packed-capillary liquid-chromatography column-switching system has been tailored for sensitive determination of hydrophobic compounds. Such compounds are not easily dissolved. . . chromatography. Enrichment-column solute focusing of large sample volumes was promoted by use of sub-ambient temperatures only, allowing the use of sample solvents that were stronger or equal to the mobile phase solvent strength. Subsequent column switching and enrichment-column temperature increment provided efficient low-dispersion back-flushed enrichment-column solute desorption onto the analytical. . .

CT Medical Descriptors:  
temperature  
liquid chromatography  
capillary chromatography  
chemical analysis  
extraction  
hydrophobicity  
accuracy  
article  
\*antioxidant  
3 (3,5 di tert butyl 4 hydroxyphenyl)propionic acid octadecyl ester  
polyethylene  
acetonitrile

L6 ANSWER 3 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

AN 2000248826 EMBASE

TI Application of the thermally tuned tandem column concept to the separation of several families of environmental toxicants.

AU Mao Y.; Carr P.W.

CS P.W. Carr, Department of Chemistry, University of Minnesota, Smith and Kolthoff Hall, 207 Pleasant Street S.E., Minneapolis, MN 55455, United States

SO Analytical Chemistry, (1 Jul 2000) 72/13 (2788-2796).

ISSN: 0003-2700 CODEN: ANCHAM

CY United States

DT Journal; Article

FS 029 Clinical Biochemistry

046 Environmental Health and Pollution Control

LA English

SL English

AB Separations of several families of environmental toxicants were optimized by means of the thermally tuned tandem column (T3C) concept. We use a tandem combination of an octadecylsilane (ODS) and a carbon-coated zirconia (C-ZrO<sub>2</sub>) column; and tune the selectivity by independently adjusting the isothermal **temperatures** of the two columns. This results in the change in the contribution that each column makes to the overall retention and selectivity. The separation was optimized by locating the optimum pair of column temperatures which give the best separation of the critical solute pair. For both triazine herbicides and carbamate pesticides samples, dramatically different selectivities and different critical pairs were observed for the two types of phases. Although neither individual phase gave adequate separation, the T3C approach provided baseline separations using only four preliminary trial separations. We also showed that, for the triazine **samples**, the T3C approach gave a better separation than did conventional **mobile** phase optimization with an ODS column. The combination of superior selectivity of T3C and high flow rate allows the baseline separation of complex mixtures in just a few minutes.

AB . . . combination of an octadecylsilane (ODS) and a carbon-coated zirconia (C-ZrO<sub>2</sub>) column; and tune the selectivity by independently adjusting the isothermal **temperatures** of the two columns. This results in the change in the contribution that each column makes to the overall retention and selectivity. The . . . separation, the T3C approach provided baseline separations using only four preliminary trial separations. We also showed that, for the triazine **samples**, the T3C approach gave a better separation than did conventional **mobile** phase optimization with an ODS column. The combination of superior selectivity of T3C and high flow rate allows the baseline. . .

CT Medical Descriptors:

\*environmental exposure  
flow rate

**chemical structure**

liquid chromatography

**chemical analysis**

nonhuman

article

\*triazine derivative

\*herbicide

\*pesticide

=>